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# User Manual

# RGB / COMPONENT VIDEO SWITCHER USER GUIDE

## RGB SWITCHERS: AT-RGB0802 TO AT-RGB6464

## RGB SWITCHERS W/AUDIO: AT-RGB0802A TO AT-RGB6464A



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## SAFETY OPERATION GUIDE

In order to ensure the credibility and the user's safety, please comply with the following items during installation, maintenance and operation of the switch.

1. The switch must be in stable position. Use only the power supply that comes with unit. Do not use an alternate as it may damage it.
2. Do not place the switcher near hot or cold surfaces or sources.
3. To avoid any damage by over heating, please keep the environment in good ventilation to radiate the heat when running the switcher.
4. The switcher should be turned off when it is not used.
5. Please do not attempt to take cover off the switcher for there is a high-voltage component inside that could cause electric shock.
6. Do not splash any liquid or chemical on or near the equipment.
7. Please make sure all the wiring are in working condition and are not cut or damaged.

## NOTICE

This RGB Switchers User Manual can be used for other RGB matrix switcher models. This manual is only an instruction for operators, not for any maintenance usage.

Any changes of functions and parameters since then will be informed separately. This manual is copyright Atlona Technologies. All rights reserved. No part of this publication may be copied or reproduced without the prior written consent of Atlona Technologies.

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## INTRODUCTION

The RGBHV series switcher is a high-performance professional switcher built for cross switching between multiple RGBHV or Component Video and Audio Signals. This series of matrix switchers were originally intended to be used for the switching of RGBHV signals, however with Component Video being a more popular and prevalent format, these switchers can be converted using the supplied BNC to RCA adapters. If audio needs to be matrixed separate from the video, we recommend using the models that are designated with "-A" in the product name. All switchers can be controlled by front panel controls, RS232 or IR.

Specifications/ Models	Video Inputs	Video Outputs	Audio Inputs	Audio Outputs	RS232 Inter- face
RGB1616-A	16	16	16	16	√
RGB2408	24	8	x	x	√
RGB2408-A	24	8	24	8	√
RGB2416	24	16	x	x	√
RGB2416-A	24	16	24	16	√
RGB2424	24	24	x	x	√
RGB2424-A	24	24	24	24	√
RGB3208	32	8	x	x	√
RGB3208-A	32	8	32	8	√
RGB3216	32	16	x	x	√
RGB3216-A	32	16	32	16	√
RGB3224	32	24	x	x	√
RGB3224-A	32	32	32	24	√
RGB3232	32	32	x	x	√
RGB3232-A	32	32	32	32	√

All modules above are for combined case design.

RGB4824	48	24	x	x	√
RGB4832	48	32	x	x	√
RGB4848	48	48	x	x	√
RGB6424	64	24	x	x	√
RGB6432	64	32	x	x	√
RGB6448	64	48	x	x	√
RGB6464	64	64	x	x	√
RGB9664	96	64	x	x	√
RGB9696	96	96	x	x	√
RGB12864	128	64	x	x	√
RGB12896	128	96	x	x	√
RGB128128	128	128	x	x	√

All modules above are for separated case design; audio case is the optional accessory. There will be wider bandwidth.

## INSTALLATION

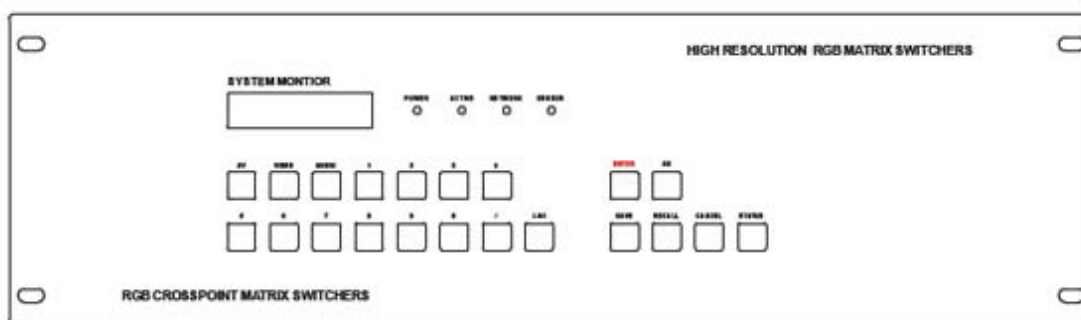
The RGB Switchers can be easily rack mounted using the rack mount ears located in the front of the unit. Secure the Switch with standard rack-hole screws. It is recommended to leave a 1U space between the units to have easy access for installation of the cables. When connecting the cables make sure all cables are connected correctly; if not, it could cause color loss or will not output a display signal.

### Packaging Includes:

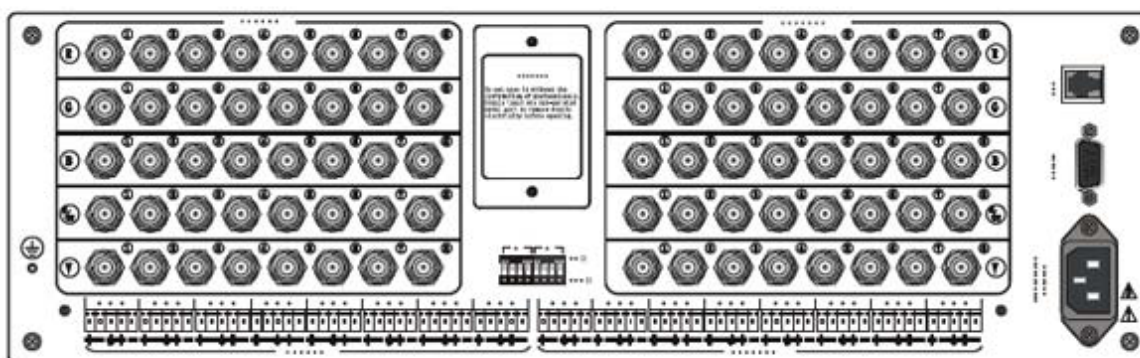
- RGB / Component Video Matrix Switcher
- RJ45 & RS-232 Communication Cables
- BNC to RCA adapters
- Power Supply Cord
- CD with Application SWITCHER 2.0
- User Manual and Quality Guarantee
- Remote Control

## Front View and Rear View of the Product

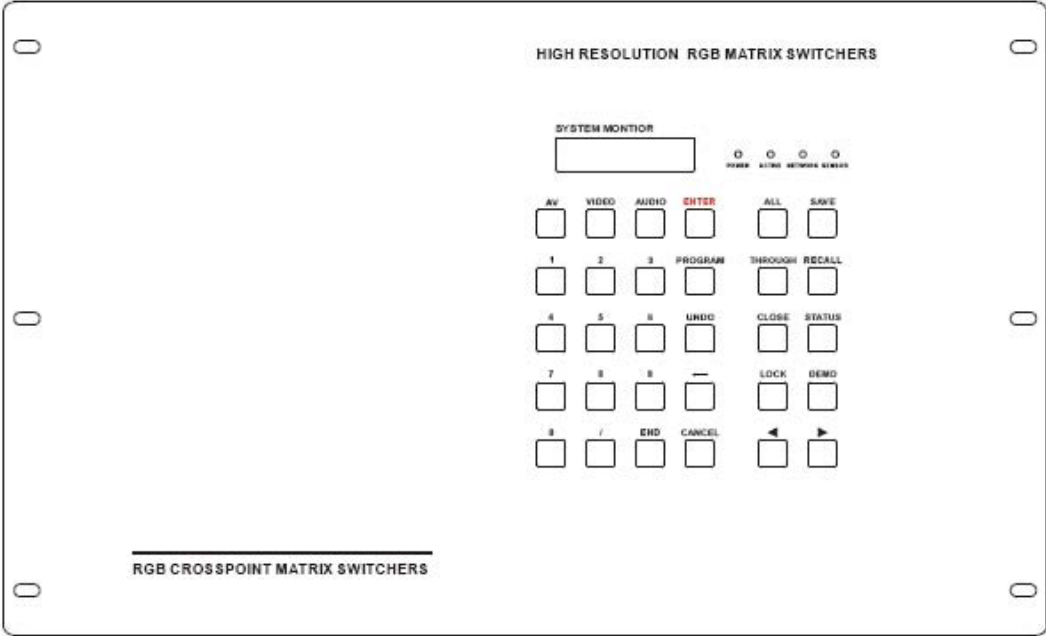
### Front View of the RGB0802-A, RGB0804-A, RGB0808-A



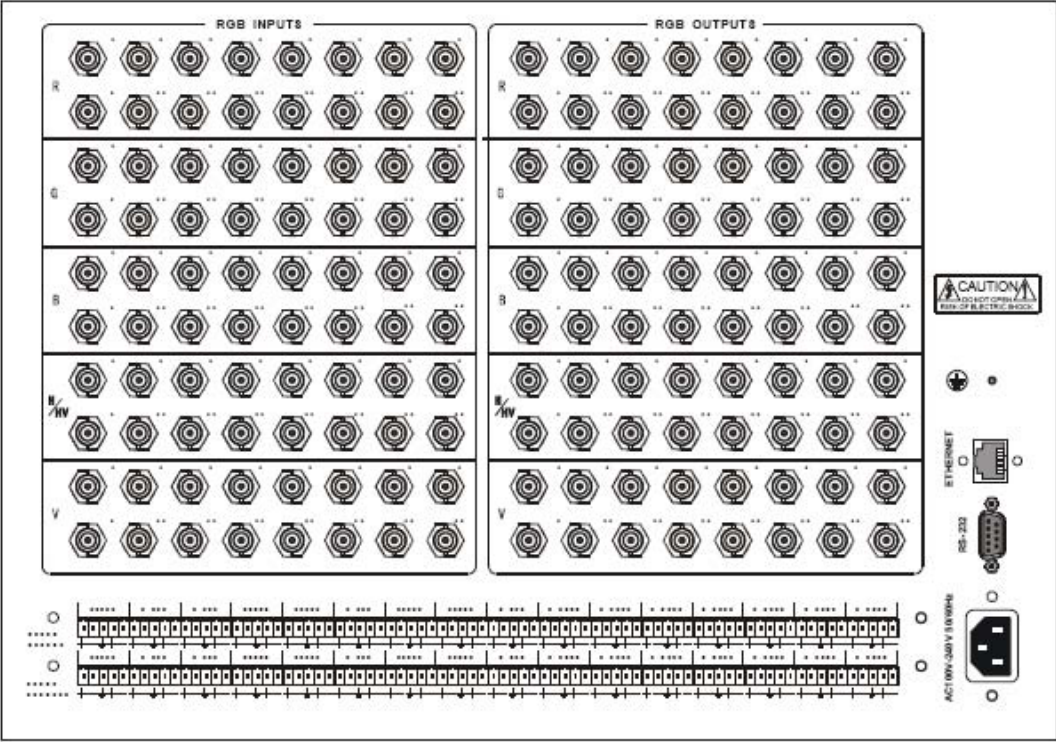
### Rear View of the RGB0802-A, RGB0804-A, RGB0808-A



Front View of the RGB1604-A, RGB1608-A

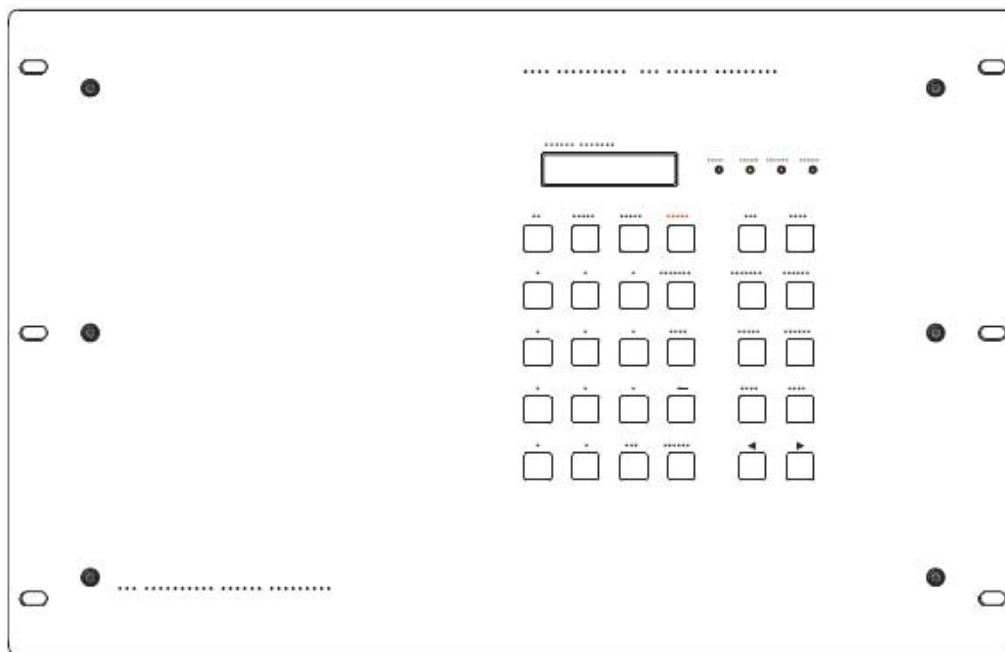


Rear View of the RGB1604-A, RGB1608-A

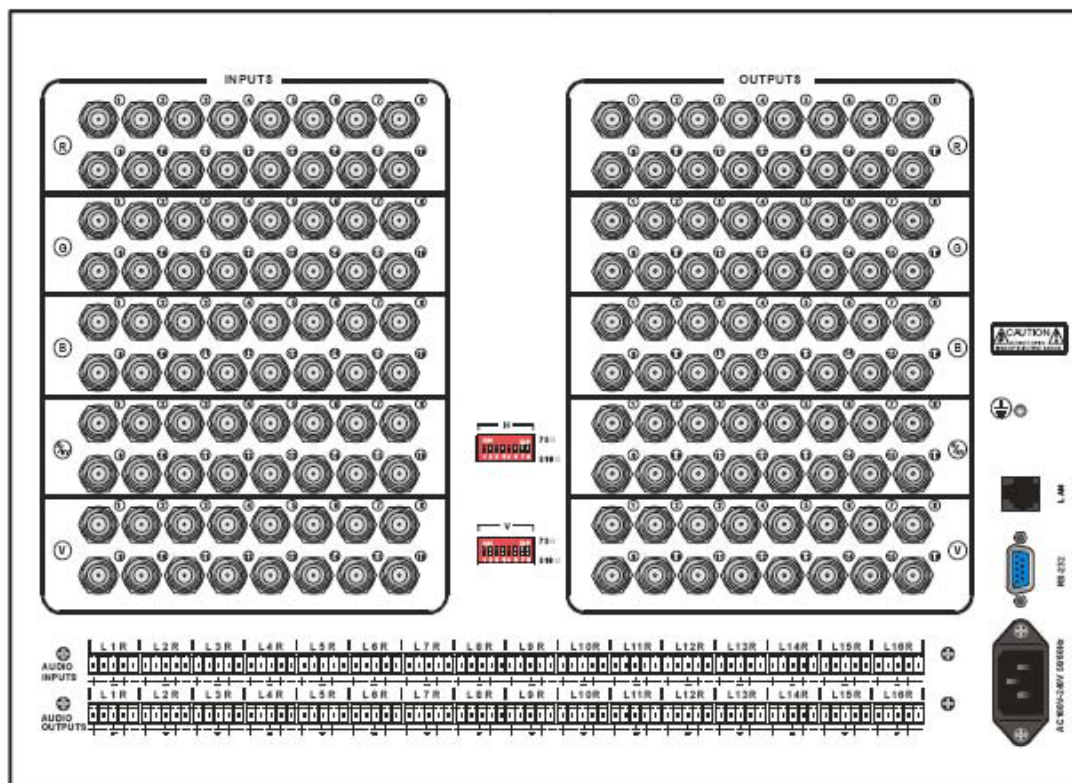




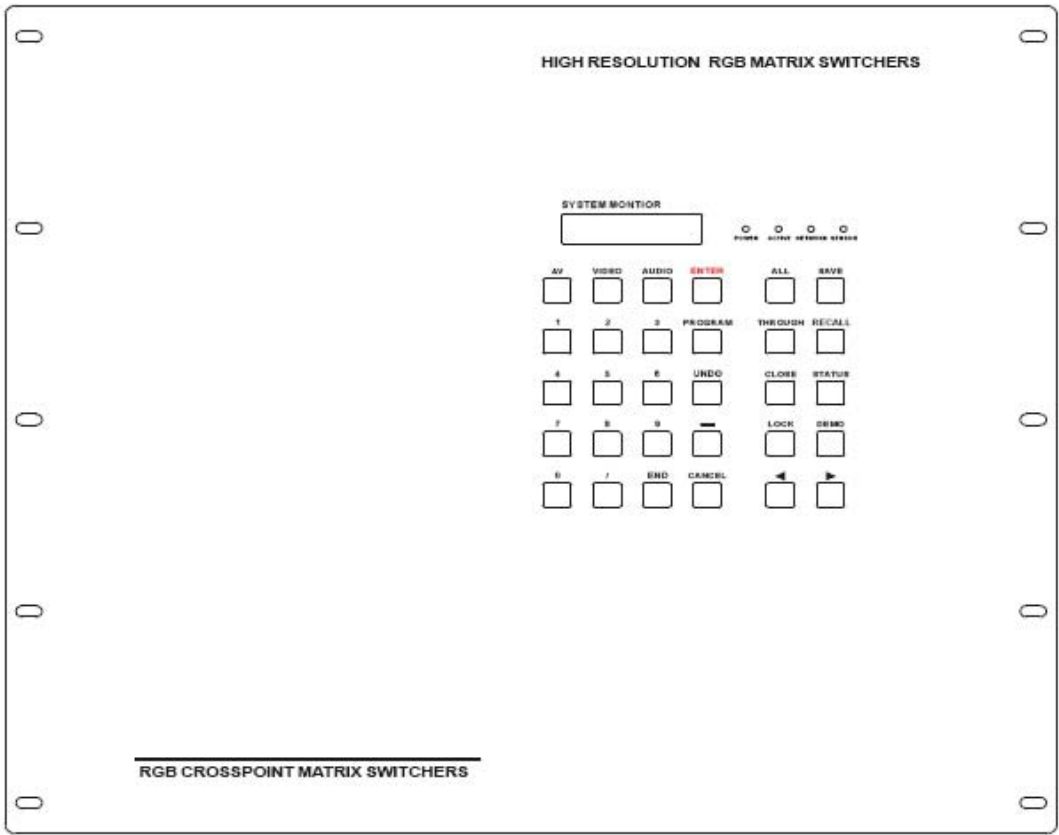
### Front View of the RGB1616-A



### Rear View of the RGB1616-A

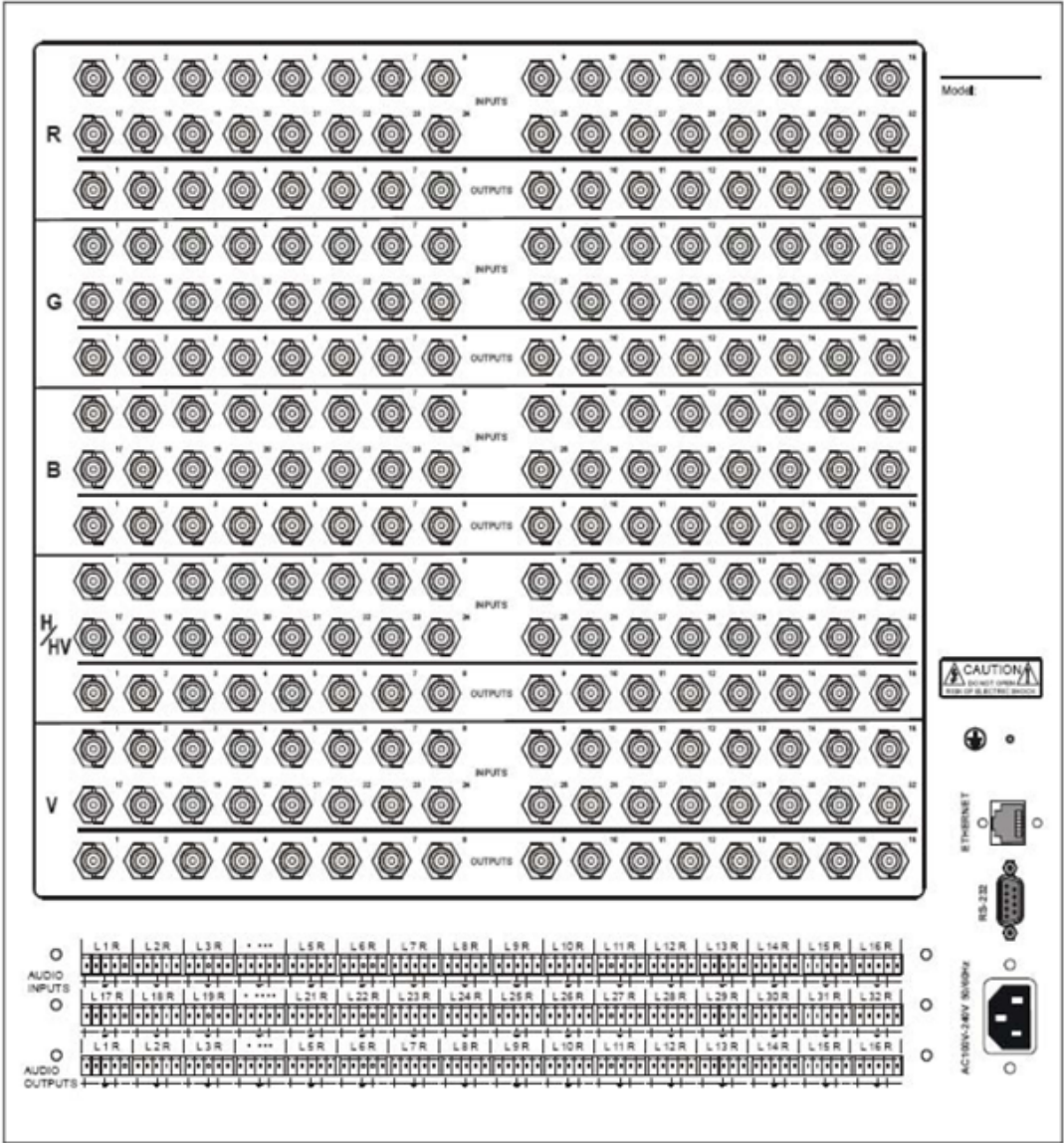


Front View of the RGB24/3208-A RGB24/3216-A

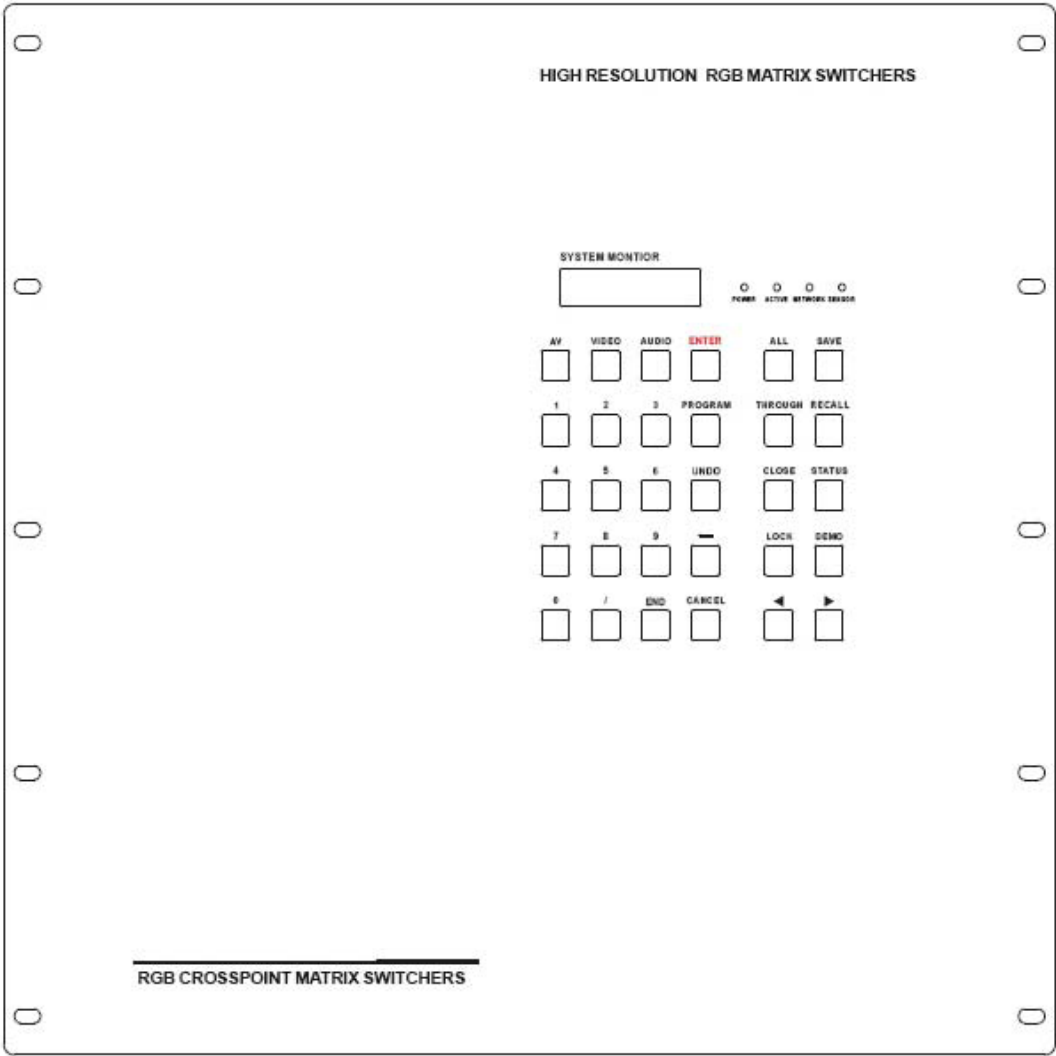




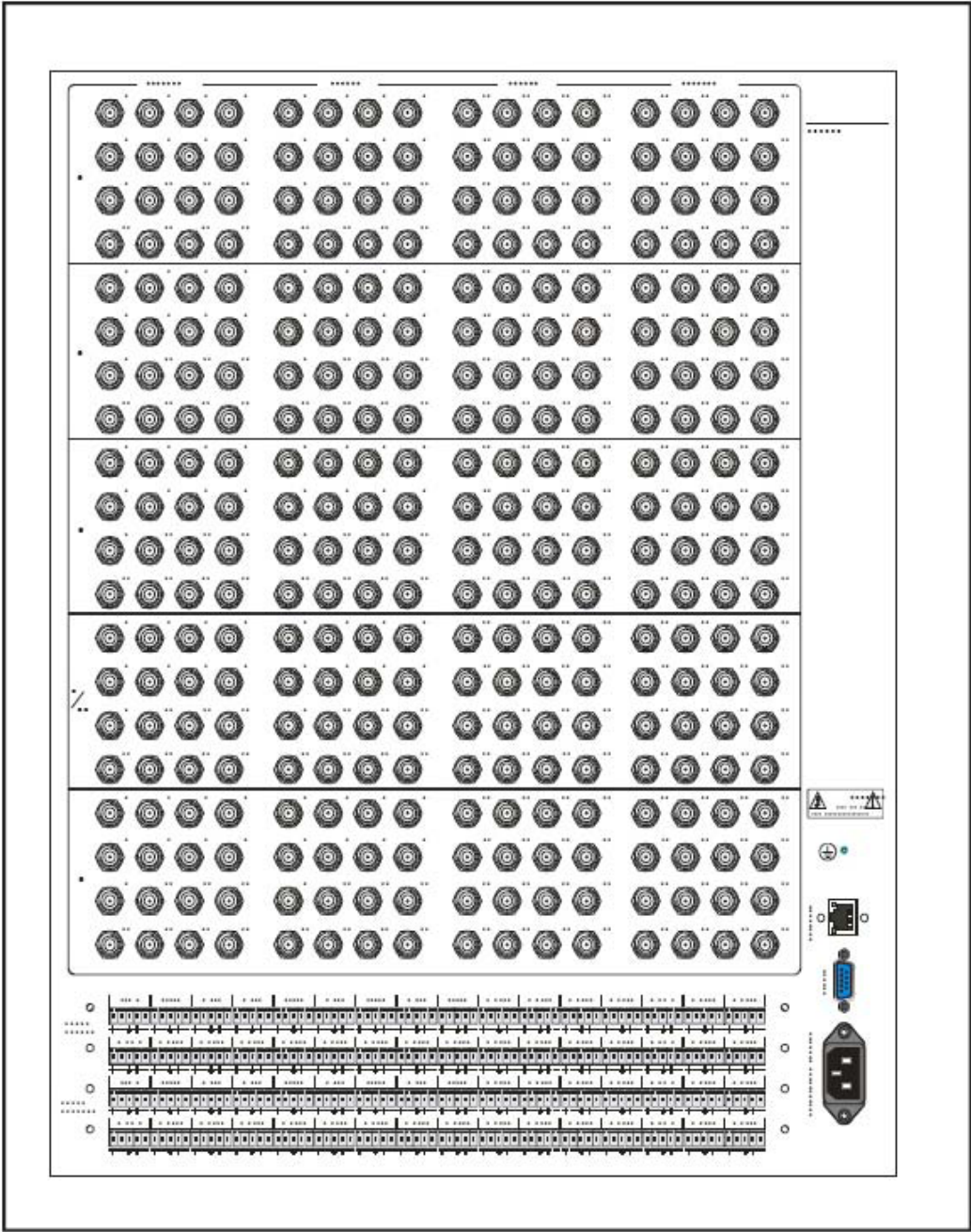
Rear View of the RGB24/3208-A, RGB24/3216-A



Front View of the RGB24/3224-A RGB3232-A



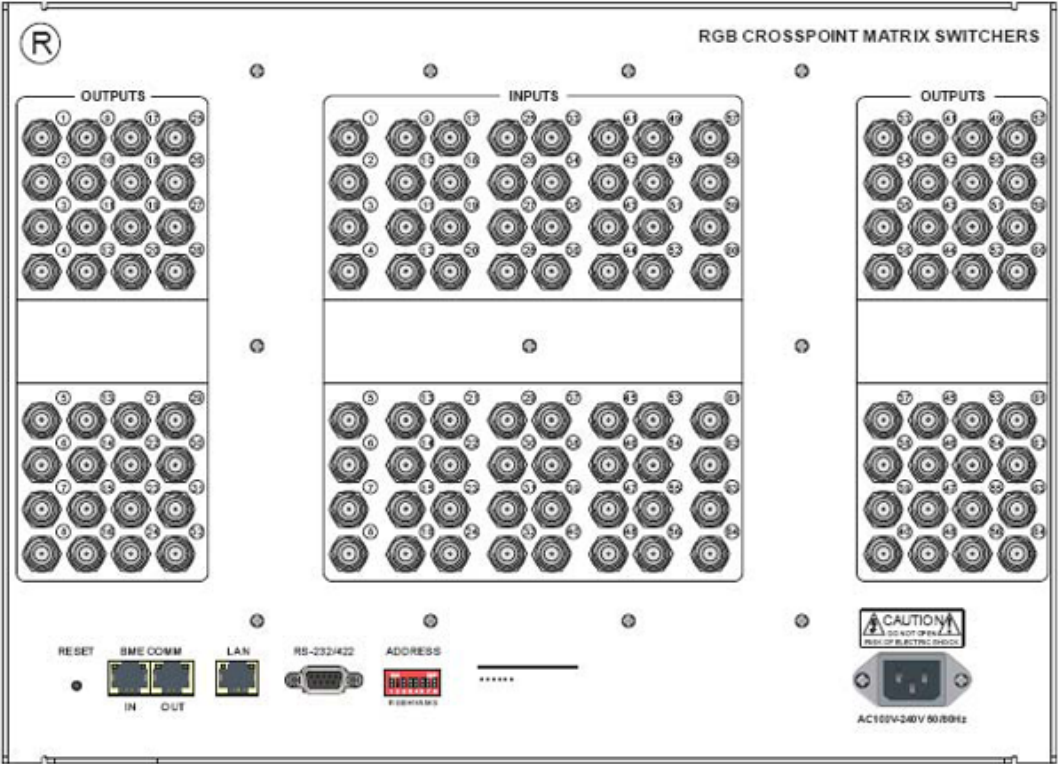
Rear View of the RGB24/3224-A, RGB3232-A



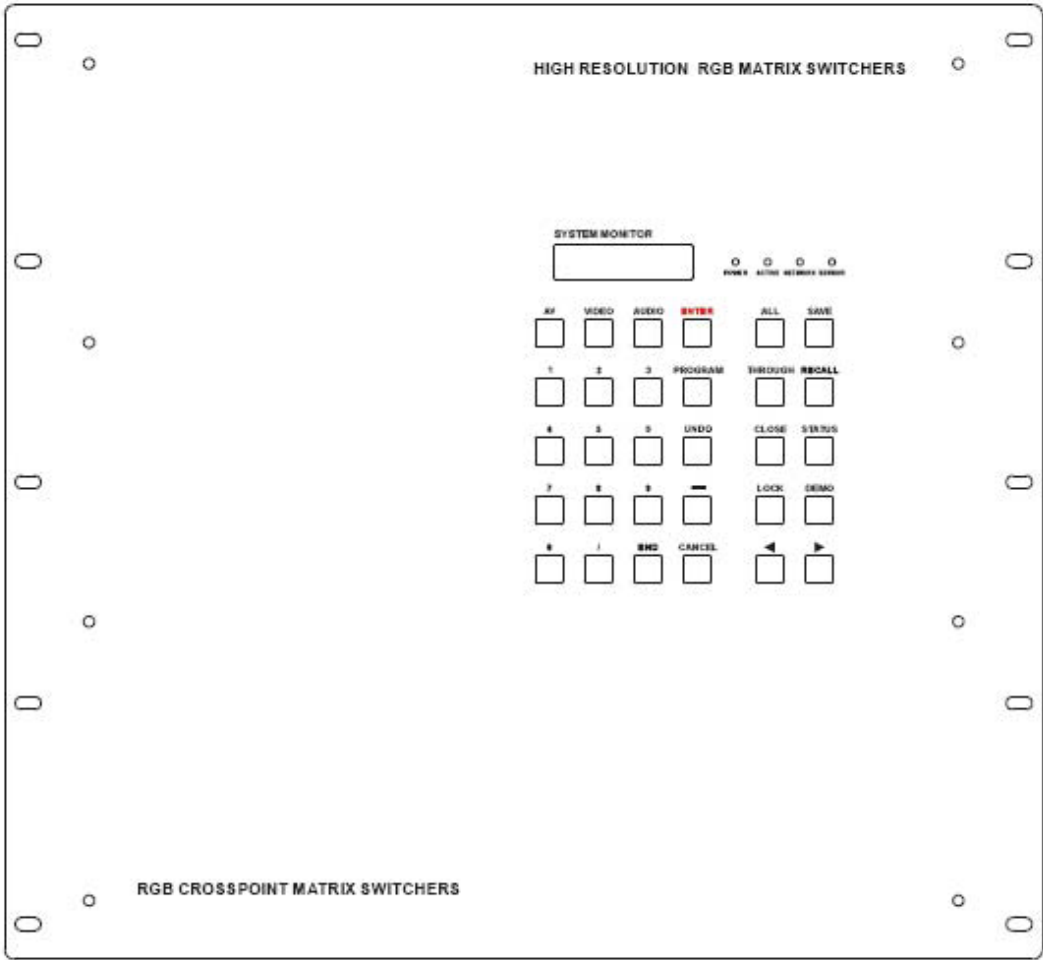
Front View of RGB48/6424, RGB48/6432, RGB48/6448, RGB6464



Rear View of RGB48/6424, RGB48/6432, RGB48/6448, RGB6464(RCH)

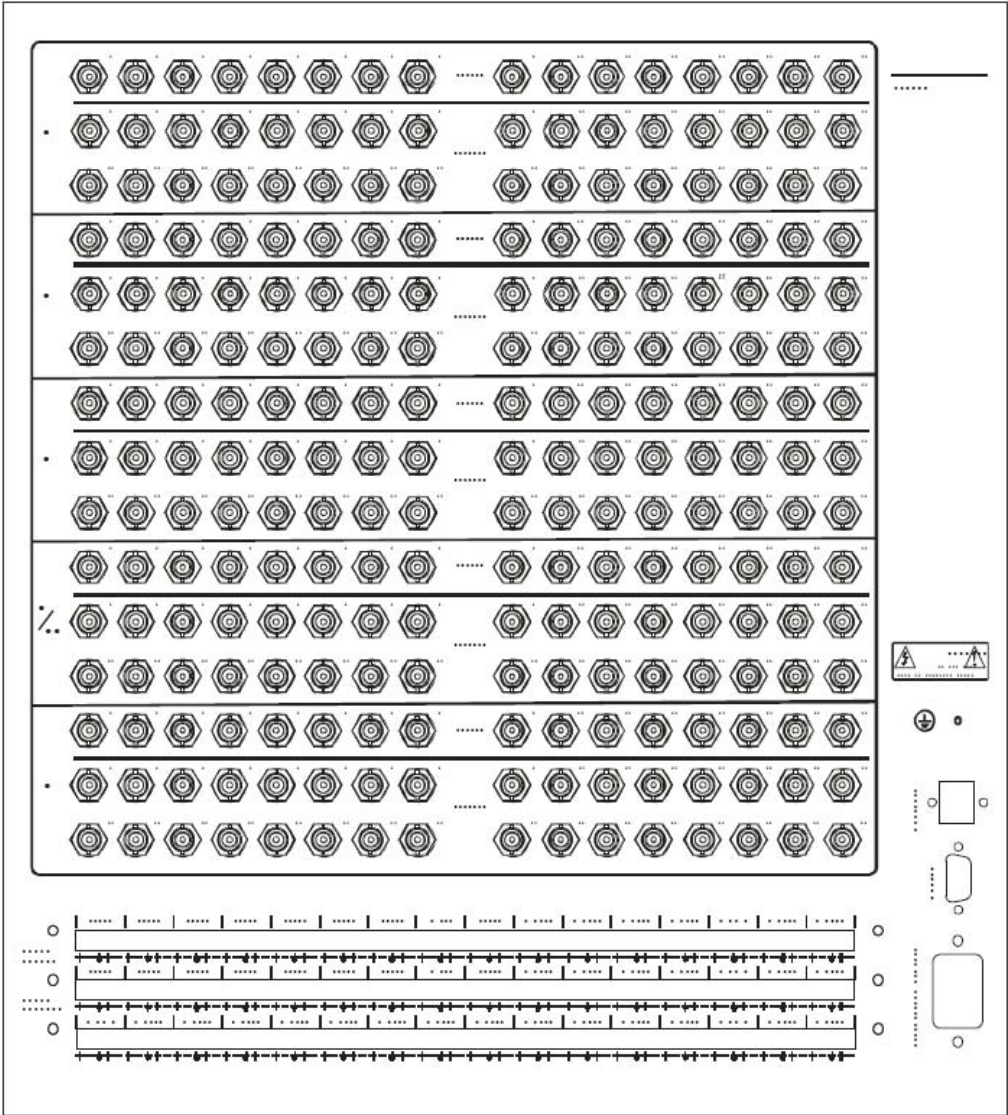


Front View of RGB08/1624-A, RGB08/1632-A



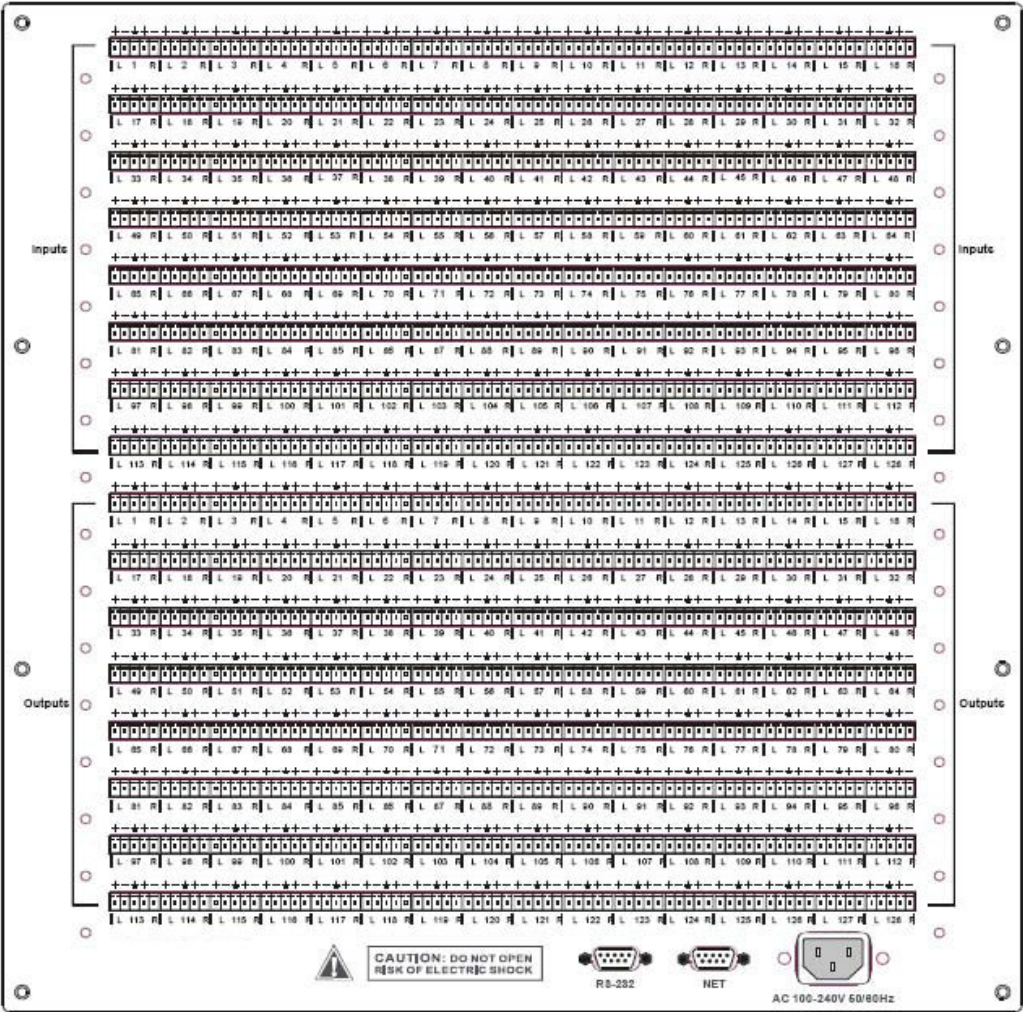


Rear View of RGB08/1624-A, RGB08/1632-A

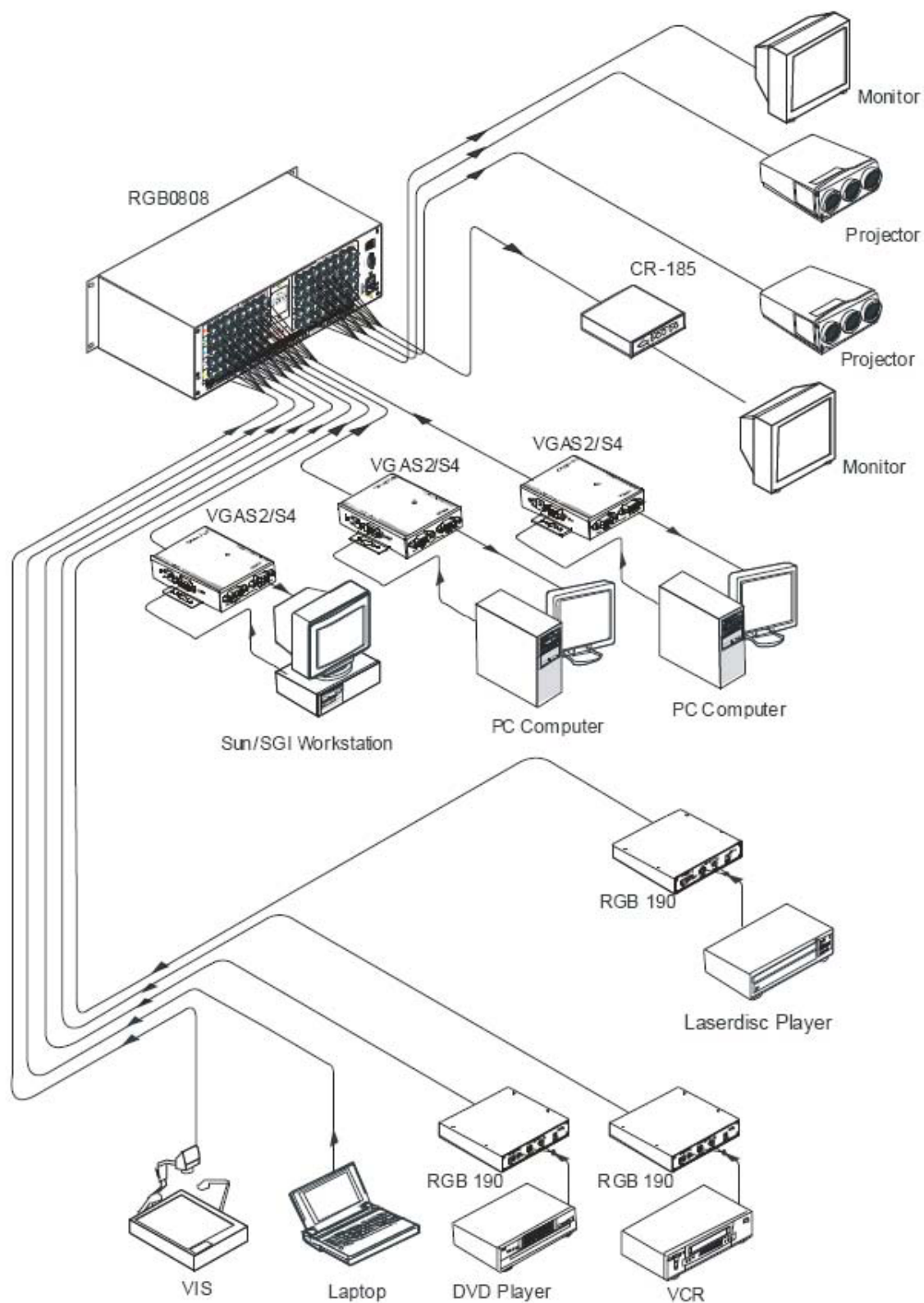




Rear View of the RGB48/64 Series Audio box

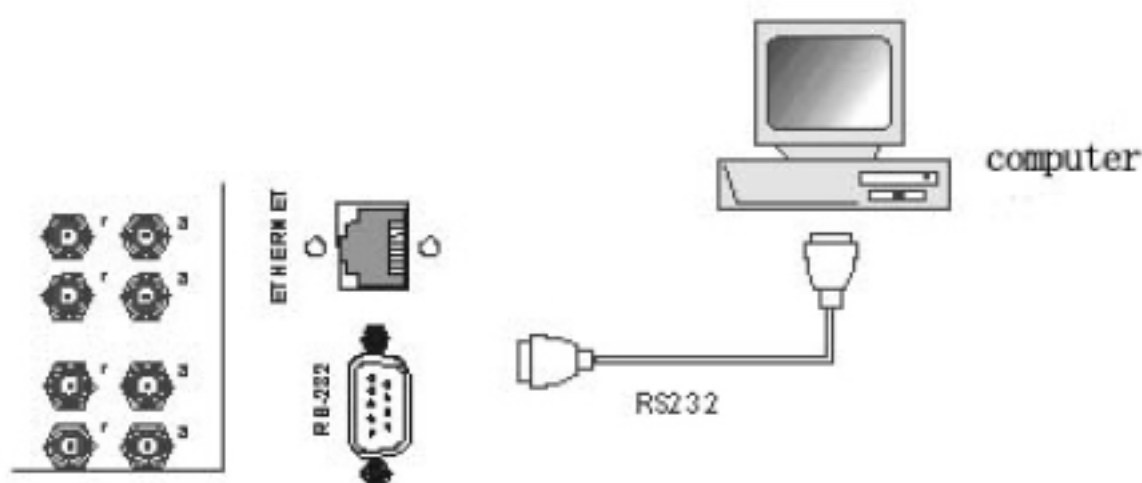






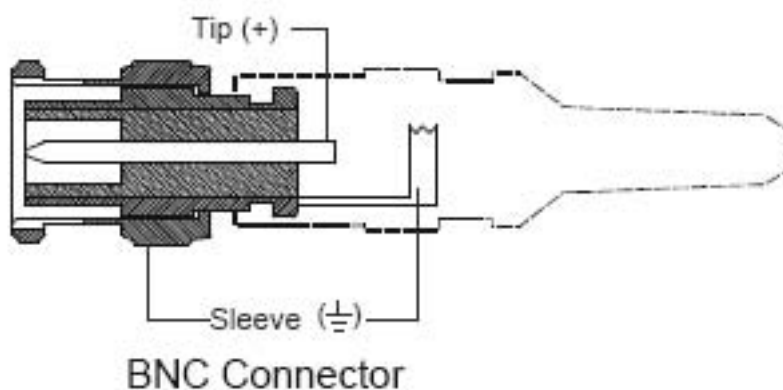
## OPERATION AND CONTROL

The Switchers can be controlled by front controls or PC, third party automation and control systems, SWITCHER 2.0 control system software or through the Ethernet control via the RS-232 communication port. The RS232 is a female 9-pin D connector. It can be switched by several control systems. When the switcher connects to the COM1 or COM2 of the computer with control software, users can control it by that computer. To control the switcher, users may use the application SWITCHER 2.0 in the supplied CD or develop their own control software.



Connection between RGB matrix switcher and the computer

The RGB / Component matrix switchers may take DVD players, computers and graphic workstations as their input signal source, and projectors, video recorders, displays and amplifiers as their output signal depending on different applications. RGBHV connection: The RGB matrix switchers supports the AV video and VGA signal sources. RGBHV signal output terminals or YC output terminals are needed in the AV device; RGBHV signal output terminals are needed in the VGA device. The BNC connector is shown as the figure below. If switching Component Video and 2-channel analog audio, utilize the existing H/V inputs and outputs with the supplied BNC to RCA adapters for connecting the audio inputs and outputs.





Please use the special five core RGB signal cord to connect the input and output devices and connect the BNC connector R (red) G (green) B (blue) H (horizontal) V (vertical) carefully.

**Attention:**

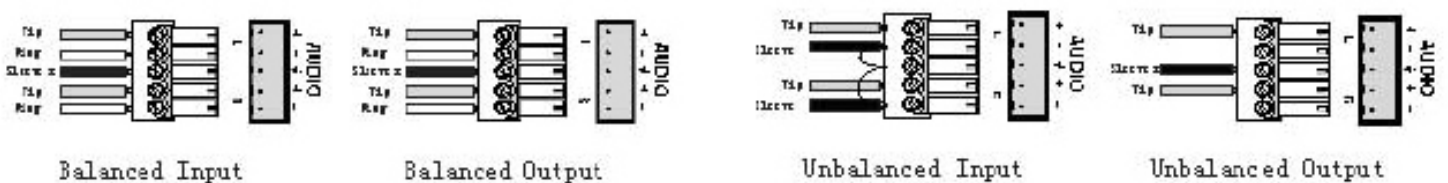
Please make sure the RGBHV connectors from the sources and to the destination should be in the same Order, Otherwise it could cause color loss or no output signal at all. Use supplied BNC to RCA for Component.

## AUDIO SIGNAL CONNECTION

"AUDIO INPUTS", "AUDIO OUTPUTS" audio network interface in RGB matrix switchers can be connected to the audio signal and amplify sources. The audio connection is a little more complicated than video. It has two types of connection: balanced and unbalanced. The balanced connection transmits a pair of balanced signals with two cables. Because interferences will have the same intensity and the opposite phases on the two cables; it will be counteracted in the end. For the low frequency extent of the audio signal, it would be easily interfered under long distance transmission. Therefore as an anti-interference connection, it is mostly used in the connection of special high end devices.

The unbalanced connection transmits signals with only one cable. Without counteraction, it can be interfered more easily. Accordingly, it is adopted for household appliances or some cases with low technical demand. Take the audio signal line for example: 1.Unbalanced: pin "G" connects to SLEEVE, pin "+" connects to TIP, pin "-" connects to pin "G"; 2.Balanced: pin "G" connects to SLEEVE, pin "-" connects to RING, pin "+" connects to TIP.

To select which connection is up to the interface of the device. When available, the balanced connection is the first choice. Before connection, please read the command or relevant demand in the user manual carefully. In some cases, there is balanced in the source signal end but unbalanced in the destination end. If in a nonstandard case, it is done to connect balanced for the balanced end and unbalanced for the unbalanced end. But if in a standard one, the converter must be used to switch the signals as the same, balanced or unbalanced.



## CONNECTING RGB48/642,RGB48/6432,RGB48/6448,RGB6464

Step 1, Set box RED as main control box, Set "R" and "M" in the "Address" of R box to the "On" position; Turn the other switches to the "Off" position, All other boxes will need to be set to slave.

Set "G" and "S" of G box to "On" position, others to the "Off" position.

Set "B" and "S" of B box to "On" position, others to the "Off" position.

Set "H" and "S" of H box "On" position, others to the "Off" position.

Set "V" and "S" of V box "On" position, others to the "Off" position.

Step 2, Using a standard CAT5 cable; connect from the OUT port of the back panel BME COMM of the main control box, to the IN port of the back panel to the first sub control box directly. Connect from the OUT port of the backboard BME COMM of the first slave control box, to the IN port of the backboard BME COMM of the second slave control box directly. Repeat above steps until the four slave control boxes are connected; making the five boxes as a whole.

## FRONT PANEL/ CONTROL

LCD display: Real time monitor of the operations and status

**"0, 1,9"** Keypad: Keys to select I/O channels and save/recall preset commands

**"AV"** AV synchronal button: To transfer video and audio signals synchronously by the switcher.  
*Example: To transfer both the video and the audio signals from input channel No.3 to output channel No.6.*  
 Operation: Press buttons in the following order "3", "AV", "6", "END", "ENTER"

**"VIDEO"** Video button: To transfer only video signals from input channel to output channel.  
*Example: To transfer video signals from input channel No.3 to output channel No.10.*  
 Operation: Press buttons in the following order "3", "VIDEO", "1", "0", "END", "ENTER"

**"AUDIO"** Audio button: To transfer only audio signals from input channel to output channel.  
*Example: To transfer audio signals from input channel No.12 to output channel No.6.*  
 Operation: Press buttons in the following order "1", "2", "AUDIO", "6", "END", "ENTER"

**" / "** Break button: To break different channels in a command  
*Example: To transfer video and audio signals from input channel No.1 to output Channel No.2, 13, 6 at the same time*  
 Operation: Press buttons in the following order "1", "AV", "2", "/", "1", "3", "/", "6", "END", "ENTER"

**"END"** Ending command button: Use when the command input has been finished.

**"ENTER"** Execute Command: To perform a command after inputting it



- "ALL"** All button: To transfer an input channel to all output channels or switch off all output channels.  
*Example 1: To transfer video and audio signals from input channel No.7 to all output channels*  
Operation: Press buttons in the following order "7", "ALL"  
Note: Commands "END" & "ENTER" do not need to be used after this command.  
*Example 2: To transfer all input signals to the corresponding output channels*  
*In another word, to switch to this status: 1->1, 2->2, 3->3, 4->4.....16->16.*  
Operation: Press buttons in the following order "ALL", "1"  
*Example 3: To switch off all the output channels.*  
Operation: Press buttons in the following order "ALL", "2"
- "SAVE"** Save button: To save the present operation to a preset command  
*Example: To save the present operation to the preset command No.2*  
Operation: Press buttons in the following order "SAVE", "2"  
Note: There are altogether 10 preset commands ranged from No.0 to No.10.
- "RECALL"** Recall button: To recall the preset command  
*Example: To recall the preset command No.2*  
Operation: Press buttons in the following order "RECALL", "2"
- "CANCEL"** Cancel button: To return to the standby status without performing any commands.  
*Example: To cancel the input instructions "1", "AV", "2", "END"*  
Operation: Just press the "CANCEL" button after the above inputs.
- "STATUS"** Inquiring status button: To inquire the present status  
*Example1: To inquire the status of output channel No.7*  
Operation: Press buttons in the following order "7", "STATUS"  
*Example2: To inquire the status of all the output channels one by one*  
Operation: Press the "STATUS" button.
- "UNDO"** Undo button: To resume to the previous status of the command.
- "PROGRAM"** Group programming button: To define, recall and clear a group of output channels.  
*Example 1: To group the output channels No.1, 2,3,4,5 under the Group 1*  
Operation: Press buttons in the following order "1", "Program", "Program", "1", "2", "3", "4", "5"  
*Example 2: To transfer signal from input channel No.1 to Group 2*  
Operation: Press buttons in the following order "1", "Program", "2"  
*Example 3: To clear the output channels under Group 1*  
Operation: Press buttons in the following order "1", "Program", "0"  
Note: Please clear the group to be set before grouping it.
- "←"** Backspace button: To erase the last input entry that was entered.

**"THROUGH"**

Through button: To transfer signals directly to the corresponding output channels.

*Example: To transfer signals from input channels No. 1, 2, 3 to their corresponding output channels.*

Operation: Press buttons in the following order "1", "/", "2", "/", "3", "THROUGH"

**"CLOSE"**

Close button: To switch off the output channels

*Example: To switch off the output channels No. 1, 2*

Operation: Press buttons in the following order "1", "END", "2", "END", "CLOSE"

**"LOCK"**

Lock button: To lock buttons on the front control panel hold it for 3 seconds.

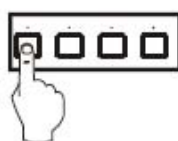
Note: When the control panel is being locked, the switcher still can be controlled via RS232 port. To unlock it, a password is needed.

**"DEMO"**

Demo button: To demonstrate the commands one by one every 3 seconds.

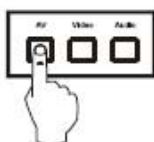
The Switch can be controlled directly by entering the following command:

"Input Channel" + "Switching Mode" + "Output Channel" + "END" + "ENTER"



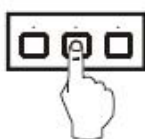
Input Command:  
1

1、 Press the button for input channel number "1"  
Display feedback on LCD: "1"



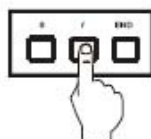
Input Command:  
1B

2、 Press the button for switching mode "AV"  
Display feedback on LCD: "B" for the switching mode of video and audio ("A" for the switching mode of audio only; "V" for the switching mode of video only)



Input Command:  
1B3

3、 Press the button for the first output channel number "3"  
Display feedback on LCD: "3"



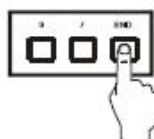
Input Command:  
1B3,

4、 Press the break button ","  
Display feedback on LCD: " ," for a break between two channels in a command



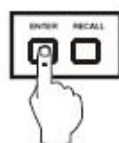
Input Command:  
1B3, 4

5、 Press the button for the second output channel number "4"  
Display feedback on LCD: "4"



Input Command:  
1B3, 4.

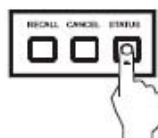
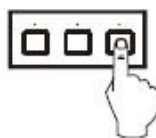
6、 Press the button "END" to finish the command  
Display feedback on LCD: "."



1B3,4.  
Switch OK

7、 Press the button "ENTER" to perform this command  
Display feedback on LCD: "Switch OK"

Example 2: To inquire the status on the output channel No.4  
Operation: Press buttons in this order "4", "STATUS"



VIDEO: 3 → 4  
AUDIO: 2 → 4

Display feedback on LCD: The video signal of output channel No.4 is transferred from the input channel No.3 and the audio signal is from the input channel No.2

## REMOTE CONTROL OPERATION

The Matrix can be controlled with the infrared remote control. The function buttons on the remote are the same as the ones on the front control panel, the remote uses the same commands and in the same order you would input them.



## OPERATION OF APPLICATION SOFTWARE

Switcher 2.0 is a switcher control application compatible with switchers with different inputs and outputs.

### Requirments to run the software

Operating System: Window98/2000/NT/XP/Vista/7

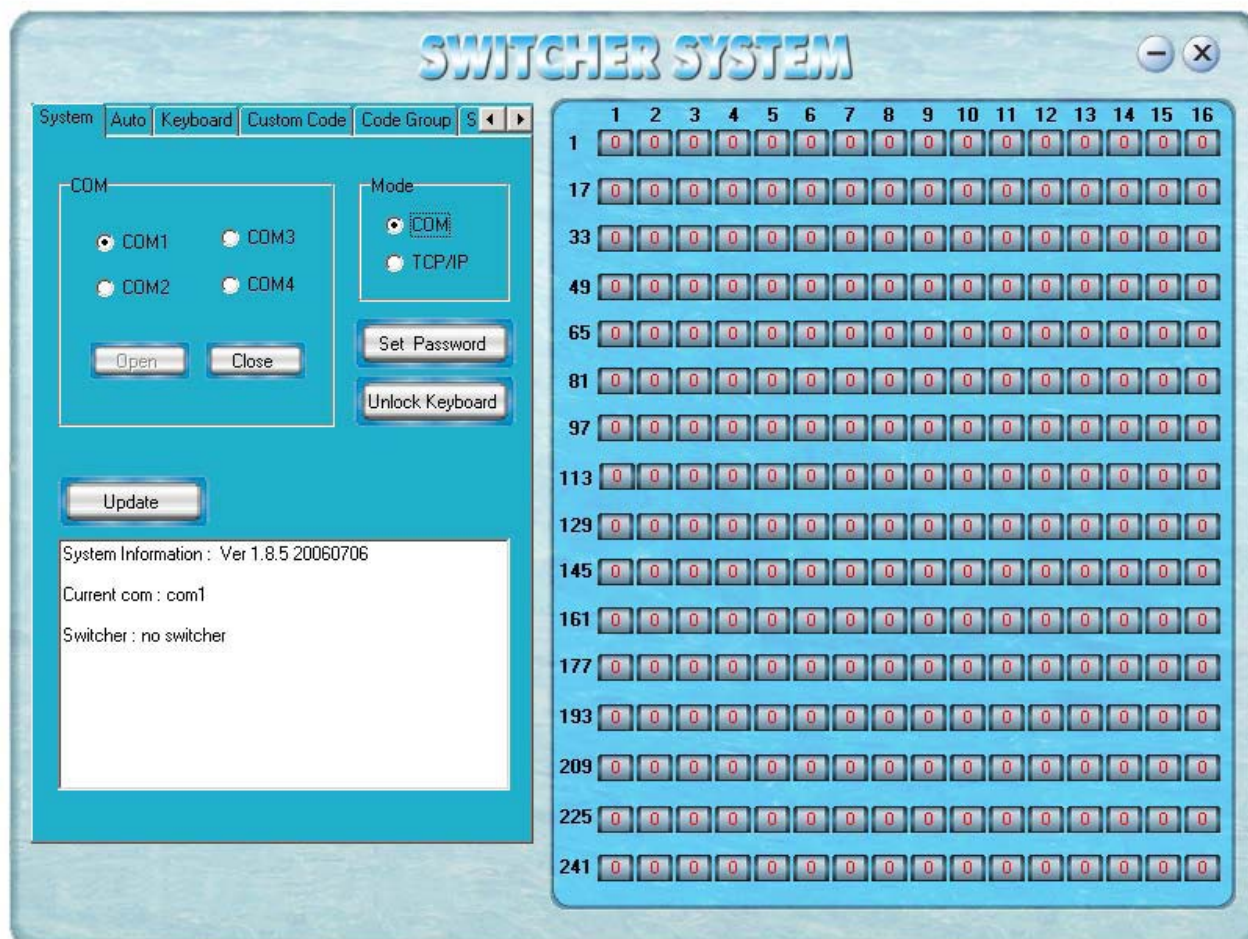
Memory: At least 32M

Space in hard disk: At least 10M

CD-ROM

COM Port

Users can select and operate at different function tabs such as:  
SYSTEM, AUTO, KEYBOARD, CUSTOM CODE, CODE GROUP and SEND/RECEIVE CODE LIST.



On the right hand side of the main window, there are 256 buttons representing the 256 output channels. When clicking on the button output 1, the text OutPort 1 will appear

**"SIGNAL"**: Select the switching mode "AV", "VIDEO" and "AUDIO"

**"INPUT A/V PORT"**: Select an input A/V channel

**"INPUT AUDIO PORT"**: Select an input audio channel

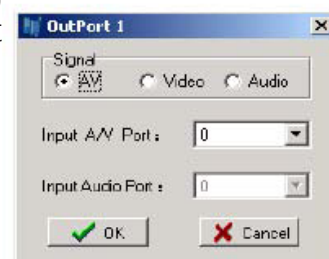
Once the selections have been entered, click "OK"

**"MODE"**: Select the communication mode between "COM" or "TCP/IP"

**"COM"**: Select a COM port to control the switcher (if selecting "TCP/IP" as the communication mode, a sub-page will appear to input the IP address of the switcher)

**"Set Password"**: Set the password for the control panel on the Matrix  
(The password must be an 8 digit number)

**"Unlock Keyboard"**: Unlock the keyboard of the control panel on the Matrix.

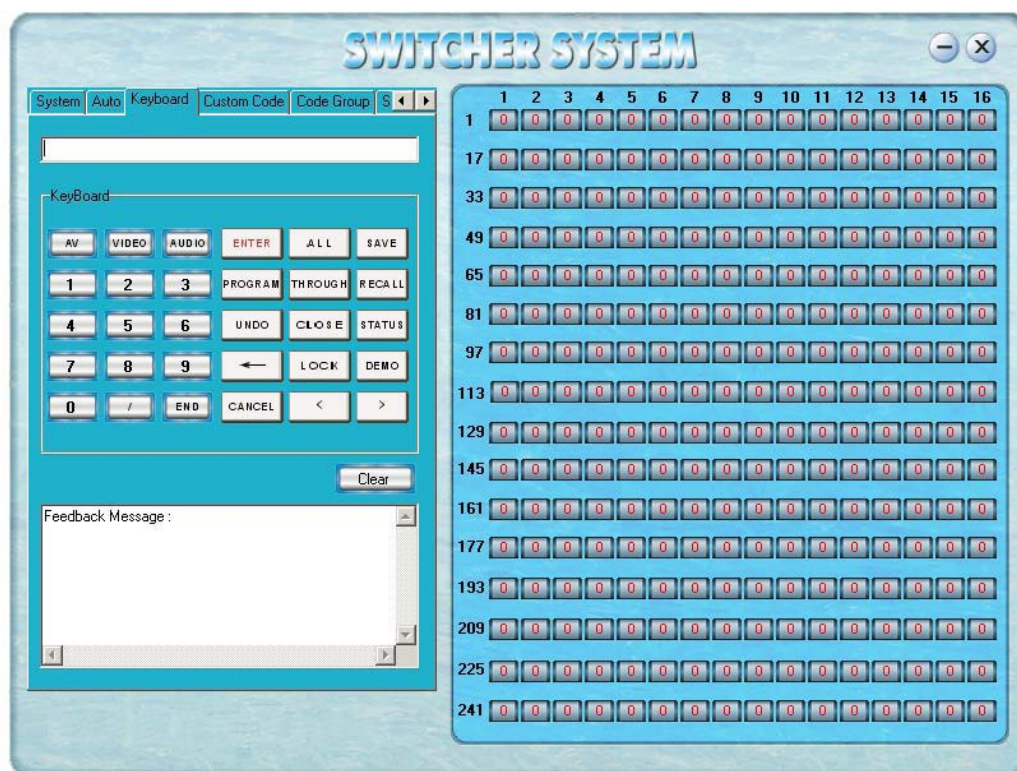




## KEYBOARD TAB

Because the function buttons on this tab are the same with the ones on the front control panel, it shares the same control operation and command format with the control panel.

Please refer to the details in Chapter 7: Operation of the Control Panel



## AUTO TAB

This tab is used to test the switcher after connecting it to all the input and output devices. For example, to test the function of an RGB64X32 matrix switcher, the Auto Tab is set as below after finishing all the connection.

Switch Mode: "AV"

INPUT: From 1 to 64

OUTPUT: From 1 to 32

Delay: 1000ms (1 second)

Click on the "START" button to perform the test, the matrix switcher will:

Transfer the signals from input channel No.1 to output channel No.1-32;

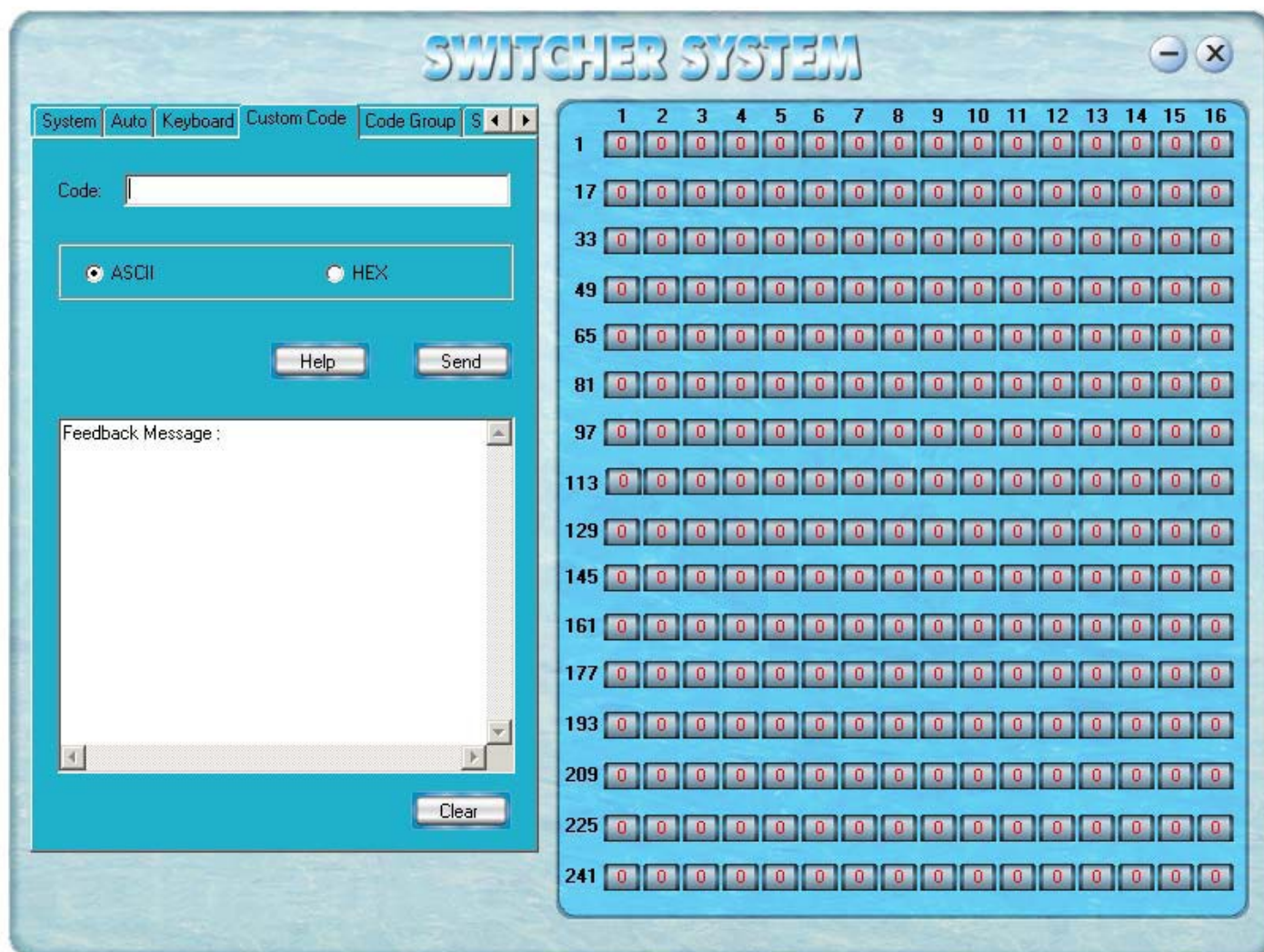
Transfer the signals from input channel No.2 to output channel No.1-32;

Transfer the signals from the input channel No.64 to the output channel No.1-32;

This switching test will perform this way one by one every second until the test is over.



## CUSTOM CODE TAB



Select between ASCII and HEX format command codes

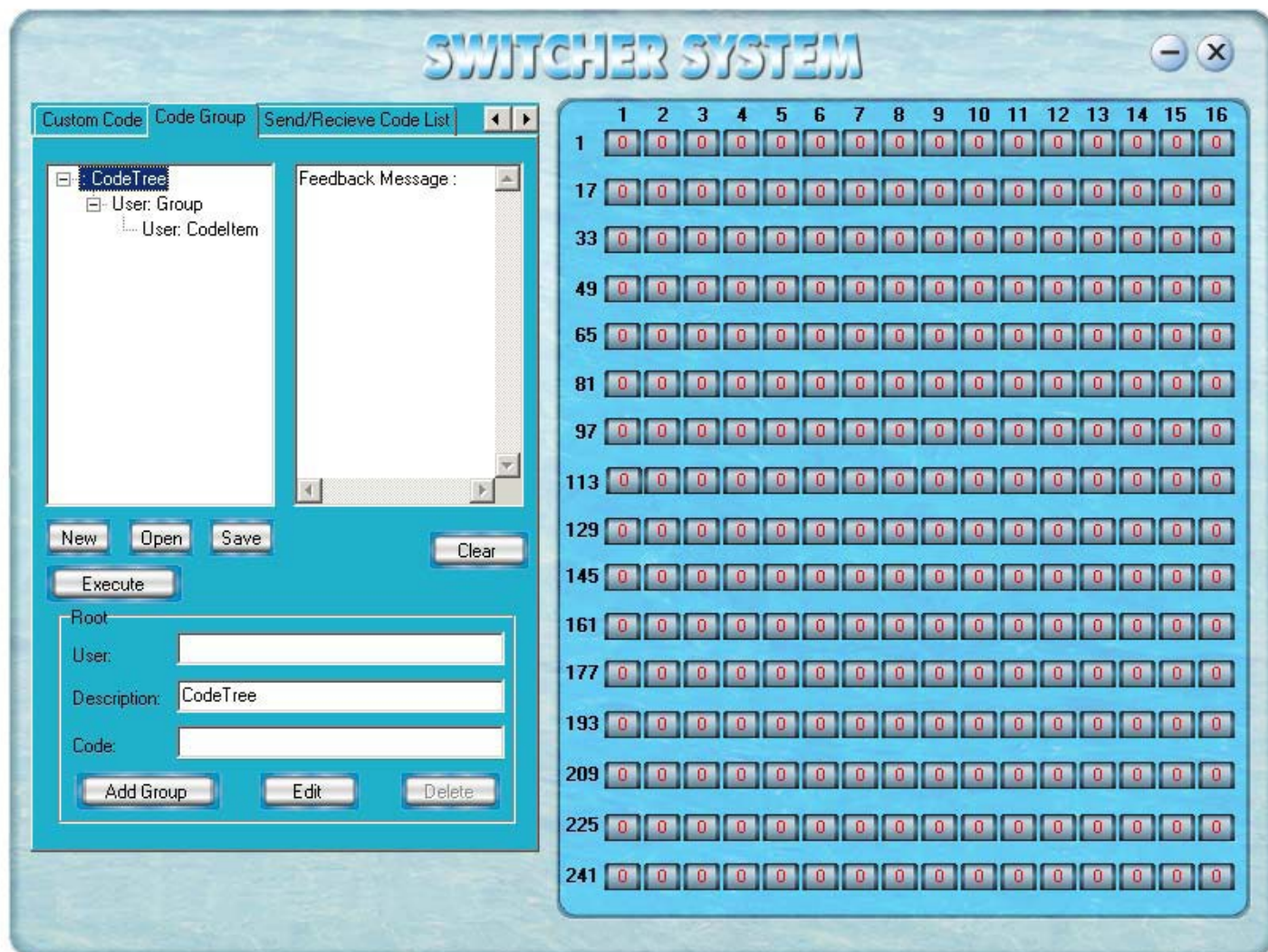
Help: Displays the list of command codes.

Send: Sends out the typed command codes.

For example, to transfer the video and audio signals from the input channel No.1 to the output channel No.7, and the audio signals from the input channel No.2 to the output channel No.4, just perform the following steps below.

1. Select the "ASCII" as the command codes format;
2. Input the command codes "1B7.2A4."
3. Click the button "Send" to perform the commands.

## CODE GROUP TAB



New: Create a new group of preset commands

Open: Opens a group of preset commands

Save: Saves the present group of preset commands

Execute: Executse a selected preset command or a selected group of preset commands

Clear: Clears the feedback window

Add Code Item: To add another new group of preset commands

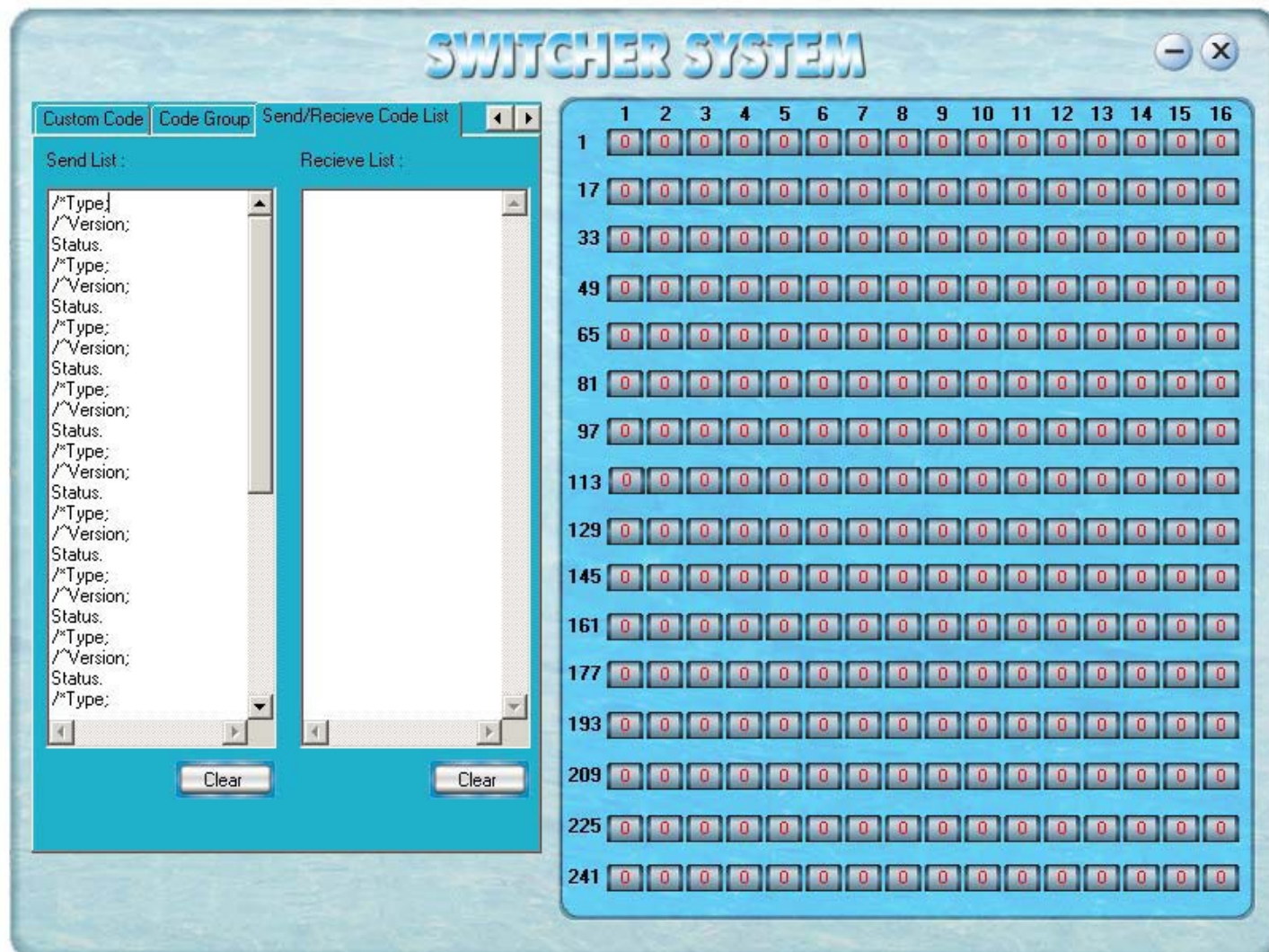
Edit: To edit the User's name (User),

Delete: Deletes the selected group.





## SEND / RECIEVE CODE LIST TAB



Send List window: Lists sent command code

Received List window: Lists feedback from the switcher

Clear: Clears either of the two lists

## SEND / RECIEVE CODE LIST TAB

With the application "Switcher 2.00" one is able to control and operate the RGB Matrix remotely

Communication protocol:

Baud rate: 9600 Data bit: 8 Stop bit: 1 Parity bit: none

Command Types	Command Codes	Functions
System Command	/*Type;	Acquires the models information.
	/+xxxxxxx;	Rewrites the passwords: must be 8 digits.
	/%Lock;	Locks the keyboard.
	/%Unlock;	Unlocks the keyboard.
	/:BellOff;	Turn off the buzzer.
	/:BellOn;	Turn on the buzzer.
	/^Version;	Acquires the version of software
	/~CREATOR20;	Switch to CREATOR2.0 command system.
	[x1]All	Transfer signals from input channel [x1] to all output channels
Operation Command	All#	Transfer all input signals to matching output channels.
	All\$	Switch off all output channels.
	[x1]#	Transfer signals from input channel [x1] to output channel [x1].
	[x1]\$	[x1]\$. Switch off output channel [x1].
	[x1] V[x2]	Transfer the video signals from input channel [x1] to output channel [x2].
	[x1] V[x2],[x3],[x4]	Transfer the video signals from input channel [x1] to output channels [x2], [x3] and [x4].
	[x1] A[x2]	Transfer the audio signals from input channel [x1] to output channel [x2].
	[x1] A[x2],[x3],[x4]	Transfer the audio signals from input channel [x1] to output channels [x2], [x3] and [x4].
	[x1] B[x2]	Transfer both video and audio signals from input channel [x1] to output channel [x2].
	[x1] B[x2],[x3],[x4]	Transfer both video and audio signals from input channel [x1] to output channels [x2], [x3] and [x4].
	[x1]P[x2]	Transfer signals from input channel [x1] to all output channels in group [x2].
	[x1]PP[x2],[x3],[x4]	Group output channels [x2], [x3] and [x4] under group [x1].
	S[x]	Acquires the output channels in Group[x].
	Status[x1]	Acquires the input channel to the output channel [x1].
	Status	Acquires the input channel to the output channels one by one.
	Save[Y]	Save the present operation to the preset command [Y]. [Y] ranges from 0 to 9.
	Recall[Y]	Recall the preset command [Y].
	Clear[Y]	Clear the preset command [Y].
	[X1]*[X2]!	Transfer both video and audio signals from input channel [x1] to output channel [x2].
	[X1]*[X2]\$	Transfer audio signals from input channel [x1] to output channel [x2].
	[X1]*[X2]%	Transfer video signals from input channel [x1] to output channel [x2].
	[X1]*[X2]&	Transfer video signals from input channel [x1] to output channel [x2].

## TECHNICAL SPECIFICATIONS

Specifications / Models	Matrix RGB8 Series	Matrix RGB16 Series	Matrix RGB64, 48 Series
Video			
Gain	0 dB		
Bandwidth	450MHz (-3dB), fully loaded 0 -10MHz @ $\pm 0.1$ dB 0 -100MHz @ $\pm 0.6$ dB		
Cross Talk Sum	56dB@10M, -40dB@100M		
Differential Phase I/Os	<1.28°, 3.58MH		
Differential Gain Error	0.1°, 3.58-4.43MHz		
Differential Gain Error	0.1%, 3.58-4.43MHz		
Max Transfer Delay	5nS( $\pm 1$ nS)		
Switching Speed	200 ns (Max)		
Signal type	RGBHV, RGBS, RGsB, RsGsBs, HDTV, Component video, S-video, Composite video		
Input video			
Connector	BNC female		
Signal Strength	1V p-p Y component video, S-video, composite video; 0.7V p-p RGB; 0.3V p-p R-Y & B-Y component video, S-video		
Maximum/Minimum Level	Analog signals: 0.5V ~ 2.0V p-p		
Impedance	75 $\Omega$		
Echo loss	-30dB@5MHz		
Max Error in DC Offset	15mV		
Output video			
Connector	BNC female		
Maximum/Minimum Level	2.0V p-p		
Impedance	75 $\Omega$		
Echo loss	-30dB@5MHz		
Max Compensation in DC Offset	$\pm 5$ mV		
Sync Signal			
Input/Output Signals	RGBHV, RGBS, RGsB, RsGsBs		
Input Level	0.5V- 5.0V p-p, : 4.0V p-p normal		
Output Level	AGC-TTL: 5Vp-p, unterminated		
Input Impedance	510 $\Omega$		
Output Impedance	75 $\Omega$		
Polarity	Straight or subtractive according to input		

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Specifications / Models	Matrix RGB8 Series		Matrix RGB16 Series	Matrix RGB64, 48 Series
Audio Signal				
I/O Connector	3.8mm with screw , 5 pole			
Gain	0dB			
Frequency Respond	20 Hz ~ 20 kHz			
General Harmonic Distortion + Noise	0.03% @ 1 kHz (under rating voltage)			
S/N	>90dB			
Segregation Rate	>80dB @ 1 kHz			
CMRR	>75dB @: 20 Hz ~ 20 kHz			
Signal	>75dB @: 20 Hz ~ 20 kHz			
Impedance	Input >10 k $\Omega$ (balanced /unbalanced) Output 50 $\Omega$ (unbalanced), 100 $\Omega$ (balanced)			
Maximum Input Level	+19.5dBu, (balanced /unbalanced)			
Gain error	$\pm$ 0.1dB			
Max Output Level	+19.5dBu, (balanced /unbalanced)			
Control type				
Serial Control Port	RS-232, 9-pin FD connector			
Baud Rate and Protocol	Baud rate: 9600 Data bit: 8 Stop bit: 1 Parity bit: none			
Serial Control Poling Protocol	2 = TX, 3 = RX, 5 = GND			
Ethernet	Connector Protocol Speed	RJ-45 Female(Optional accessory) TCP/IP Full/half-duplex 10/100		
Control Application	Switch 2.0			
Features				
Power Supply	100VAC ~ 240VAC, 50/60 Hz, universal international power supply			
Temperature	Storing and operating temperature: -20° ~ +70°C			
Humidity	Storing and operating humidity: 10% ~ 90%			
Size	485(L)X133(W)X266(H)	485(L)X311(W)X266mm(H)	485(L)X315(W)X266mm(H) (single box)	
Weight	4.5kg	9.5kg	10kg	
MTBF	30,000 hours			
Quality Guarantee	3 Year Warranty			



## TROUBLESHOOTING

Problem	Solution
Output image is displayed with a ghost	Check display settings, try another high quality cable
Color loss or no video on output signal	Check both the input and output connections
Remote control doesn't work	Check batteries, If broken, contact dealer
The switcher cannot be controlled by computer through COM port.	Check the COM port in the software. Make sure the COM is working
NO sound when switching with I/O signal.	Make sure the beeper is switched on. If it is it may be broken inside, contact dealer
NO image on output signal	Check the Input and Output connectors they may be loose. Check the connection cord it may be broken. Check the output device and make sure it is connected to the output channel.
Power Indicator doesn't work, no display on LCD no response to any operation.	Check the power cord to see it is connected and not damaged.
Interference in the output image	Check to see if the unit is well grounded.
Static gets stronger when connecting BNC connectors	The unit is not grounded correctly. Correct issue immediately or damage may be caused to the switch.
Beeper makes sound. LCD is displaying normally and there is a returning code. But there isn't any Video or Audio output.	Check connections, and replace if damaged
The switcher cannot be controlled by front panel keys, RS-232 port or remote control	The unit may be broken, contact dealer for repair.

## SAFETY INFORMATION

### Safeguards



To reduce the risk of electric shock, do not expose this product to rain or moisture



Do not modify the wall plug. Doing so will void the warranty and safety features.



If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.



This equipment should be installed near the socket outlet and the device should be easily accessible in the case it requires disconnection.

### Precautions

FCC regulations state that any unauthorized changes or modifications to this equipment, not expressly approved by the manufacturer, could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product, or cause fires.

In the event of an electrostatic discharge this device may automatically turn off. If this occurs, unplug the device and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements, fish tanks, and swimming pools.

Use only accessories recommended by Atlona to avoid fire, shock, or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning and not cleaning fluid or aerosols. Such products could enter the unit and cause damage, fire, or electric shock. Some substances may also mar the finish of the product.

Never open, remove unit panels, or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-RGB-MATRIX. Opening the product will void the warranty.

Do not attempt to service the unit. Disconnect the product and contact your authorized Atlona reseller or contact Atlona directly.

## **WARRANTY**

### **Limited Warranty**

Atlona Technologies warrants that (a) its products (the AT-RGB-MATRIX) will perform substantially in accordance with the accompanying written materials for a period of 3 years from the date of receipt and (b) that the product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to customers that fall within those areas.

### **Customer Remedies**

Atlona Technologies' and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' decision, either return of the price paid for the product, repair, or replacement of the product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of the Customer's receipt. This Limited Warranty is void if failure of the product has resulted from accident, abuse, misapplication, or natural occurrence. In example but not limited to: power surges (electrical storms, local power outage), dropping the product (or items on the product), contact with fluids, and physical misconduct (i.e. kicking or punching). Any replacement product will be warranted for the remainder of the original warranty period.

### **No other warranties**

To the maximum extent permitted by applicable law, Atlona Technologies and its suppliers disclaim all other warranties, either expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with regard to the product and any related written materials. This Limited Warranty gives customer specific legal rights. Customers may have other rights depending on the jurisdiction.

### **No liability for damages**

To the maximum extent permitted by applicable law, in no event shall Atlona Technologies or its suppliers be liable for any damages arising out of the use of or inability to use this product, even if Atlona Technologies has been advised of the possibility of such damages. Such damages include but are not limited to: special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss. Atlona Technologies' and its suppliers' entire liability under any provision of this agreement shall be limited to the amount actually paid by you for the product. Some Jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damage. The above limitations may not apply to you in such jurisdictional cases.

## ATLONA PRODUCT REGISTRATION

Thank you for purchasing this Atlona product. - We hope you enjoy it and will take an extra few moments to register your new purchase.

Registration creates an ownership record if your product is lost or stolen and helps ensure you'll receive notification of performance issues and firmware updates.

At Atlona, we respect and protect your privacy, assuring you that your registration information is completely secure. Atlona product registration is completely voluntary and failure to register will not diminish your limited warranty rights.

**To register go to:** <http://www.atlona.com/registration>